PB-243 662

# OIL AND HAZARDOUS MATERIALS SPILL INFORMATION RETRIEVAL SYSTEM. USER'S MANUAL (OHM-SIRS)

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This manual is designed to provide guidance to those who prepare reports on spill episodes to the Division of Oil and Special Materials Control, and who expect to access the system for developing Regional analytical studies. The increasing number of spills reports and the need for more accurate ststistical analysis of episodes, make it imperative that Regions report promptly and in accordance with this manual in order that data are available to the Congress, EPA top management, the Office of Management and Budget, and the Public. Even more important is the need for a capability to fully support the Spill Prevention Program and assess its effectiveness.

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# USER'S MANUAL

# OIL AND HAZARDOUS MATERIALS

# SPILL INFORMATION RETRIEVAL SYSTEM

# (OHM-SIRS)

# INTRODUCTION

The Oil and Hazardous Materials Spill Information Retrieval System (OHM-SIRS) is an automated file designed to facilitate rapid retrieval of information on the thousands of spill episodes reported each year. Data Files are constructed such that a systematic query program provides for on-line operation, data summaries and statistical evaluations related to oil and hazardous materials discharges.

The primary function of the system is to provide rapid feedback of statistics on discharges of oil and hazardous materials to Regional and Headquarters' personnel to serve as the basis for program management and operational decisions.

This manual is designed to provide guidance to those who prepare reports on spill episodes to the Division of Oil and Special Materials Control, and who expect to access the system for developing Regional analytical studies. The increasing number of spill reports and the need for more accurate statistical analysis of episodes, make it imperative that Regions report promptly and in accordance with this Manual in order that data are available to the Congress, EPA top management, the Office of Management and Budget, and the public. Even more important is the need for a capability to fully support the Spill Prevention Program and assess its effectiveness.

The instructions that follow should be adhered to the maximum practicable extent. This will reduce the time required for loading into the file and facilitate data retrieval.

## TITLE

Title should contain only the words Oil, Hazardous, or ther. The only additional information to be included in this segment is the word Potential, if appropriate.

## LOCATION

Location should include the name of State/County/ the nearest city to the receiving body of water. The name and address (or township and range) of the facility should be included if it differs from the entry under Organization.

## LATITUDE and LONGITUDE

Latitude should be expressed in six digits: Degrees, Minutes and Seconds. Longitude should be expressed in seven digits: Degrees, Minutes and Seconds. Zero should be entered in place of missing characters.

## DATE OF OCCURRENCE

Enter as yearmonthday. i.e.: 730214 (1973 February 14)

## LAST REPORTING UNIT

Enter EPA Region by digit only, i.e.: 1, 2, 3, 4; if the report originated by the U.S. Coast Guard, enter USCG after Regional designation. i.e.; 1 USCG

## BODY OF WATER

Identify the water area by entering (1) Inland, (2) Coastal, or (3) Great Lakes, followed by the appropriate type of receiving body of water, as listed under each of these headings, and the name of receiving water body and river mile, if known. i.e.: Inland river Mississippi MP 186

Please enter one of the above, even if the spill did not go into water, as it clarifies area of responsibility.

Inland Area (EPA areas of responsibility pursuant to National Contingency Plan)

River

* Creek

Stream

*Do not code using word Creek - this is for retrieval of data only, entered in computer pre Oct 1972. For coding use word Stream.

Lake

Canal

Reservoir

Pond

Port (Including harbor areas)

Terminal or Dock

Beach

Coastal (USCG areas of responsibility)

Bay, Estuary, or Sound

Gulf of Mexico

Port (Including harbor areas)

Terminal or Dock

Beach

Channel

Canal

Inlet

Ocean

Great Lakes (USCG areas of responsibility)

Port (Including harbor areas)

Tributary

Open water

Bay, Estuary, or Sound

Terminal or Dock

Beach

Channel, Canal, or Inlet

## TYPE OF POLLUTANT

TYPE: Indicate the type of substance which was discharged or which threatened to discharge. If the substance can be described by more than one of the items below, enter the item describing the most important characteristic in terms of water pollution as follows:

1. Oil

| | | |
|---|---|---|
| Animal Oil | JP-1,2,3,4 or 5 | Paraffin Wax |
| Asphalt & Feed Stock | Kerosene | Vegetable Oil |
| Bunker | Lubricating Oil | White Oil |
| Creosote | Naphtha | Waste Oil (Specify: Bilge Engine Industrial) |
| Crude | Fuel NR. 1 or 2 | |
| Cutting Oil | Gasoline | Grease |

2. Hazardous Substance

Specify trade name, % concentration of hazardous substance by weight, or common name.

3. Other

Sewage, sludge, miscellaneous (not hazardous substances).

## QUANTITY DISCHARGED

QUANTN:
QUANTU:
QUANTE:

Enter the quantity discharged at QUANTN and the quantity entering the water at QUANTE. These segments may only be searched arithmetically; therefore, the unit of measure (gallons for liquids, pounds for solids and gasses) should be entered at QUANTU, which may be searched alphabetically. If the quantity discharged is not known, enter "Unknown A" at QUANTU. If a known quantity is recovered from the water, and that is the

only known factor, enter this amount at both QUANTN and QUANTE (with the unit of measure at QUANTU) as if the quantity spilled and the quantity reaching water were both known. If the quantity reaching water is unknown, enter "Unknown B" at QUANTU.

Examples:

Case 1. 3000 gallons discharged, 1500 gallons reached water.

2. 3000 gallons discharged, unknown quantity reached water.

3. Unknown quantity discharged, 1500 gallons reached water.

4. Unknown quantity discharged, unknown quantity reached water.

| | Case 1 | Case 2 | Case 3 | Case 4 |
|---|---|---|---|---|
| QUANTN: | 3000 | 3000 | 1500 | |
| QUANTU: | Gallons | Gallons Unkown B | Gallons | Unknown A |
| QUANTE: | 1500 | | 1500 | |

## SOURCE OF DISCHARGE

SOURCE: This is the exact or suspected source of pollution or threat of pollution, including the facility and company name. The source is not necessarily the same as the responsible party. (Example: If a barge's cargo tank overflows, the barge should be considered the source even though personnel error or shore equipment failure may have caused the discharge.) A transfer hose should be considered part of the vessel, vehicle, or facility to which it is attached. The important elements here are: onshore vs. offshore; transportation vs. non-transportation, medium or activity. When appropriate, include pipe diameter, and facility installation date, if known; for vessels use offical number and name. Identify source by entering

one of the following: (1) Onshore transportation, (2) Offshore transportation, (3) Onshore nontransportation, (4) Offshore nontransportation, followed by the specific source, as listed under each of these headings.

Onshore Transportation

- Bulk cargo transfer
- Fueling
- Cargo transfer
- Transportation pipeline
- Rail transfer
- Highway dry bulk
- Highway passenger
- Highway fueling
- Other - specify
- Rail cargo transfer
- Rail liquid bulk
- Rail dry bulk
- Rail general cargo
- Highway liquid bulk
- Highway general cargo
- Rail fueling
- Highway cargo transfer

Offshore Transportation

- Naval vessel
- Passenger vessel
- Dry cargo vessel
- Tanker
- Towboat or tugboat
- Dry cargo barge
- Other - specify
- Tank barge
- Fishing vessel
- Recreational vessel
- Transportation pipeline
- Bulk cargo transfer
- Fueling
- Cargo transfer

Onshore nontransportation

- Refinery
- Bulk storage (includes tank farms)
- Industrial plant
- Oil or gas production
- Pipeline (gathering lines and production)
- Industrial plant
- Processing plant
- Other - specify

Offshore nontransportation

- Oil or gas production
- Pipeline (gathering lines and production)
- Other - specify

ORGANIZATION CAUSING DISCHARGE

When available, the complete name and address of responsible party and/or suspected parties should be included. If the address of the facility (where spill occurred) and the company responsible are not identical, enter the facility address at the space provided at LOCATION.

SPECIFIC CAUSE OF DISCHARGE

Select the criteria that best describes the most important event which caused the episode or potential episode. Enter the major cause first (underlined), such as equipment failure, casualty, etc., followed by specific cause, as listed under each major heading. Example: Casualty - grounding, or Structural Failure - pipeline rupture.

Casualty

- Collision between source and another vehicle
- Collision between source and fixed object
- Capsizing or overturning
- Sinking or floundering
- Fire
- Explosion
- Grounding
- Well blowout

Structural Failure (This is a major system failure)

- Tank rupture
- Storage tank leak
- Storage tank rupture
- Transportation pipeline rupture (trunk line)
- Other - specify

Equipment Failure (Failure of a component within a system)

- Hose rupture
- Line leak
- Pipe leaks or ruptures
- Pipeline break
- Valve
- Pump
- Other - specify
- Weld failure
- Corrosion or rust
- Defective fitting valves or closures
- Loose fitting valves or closures
- Alarm
- Automatic shutdown

Personnel Error (Specify improper action, if known)

- Tank overflow
- Incorrect valve handling
- Other - specify
- Flanges not properly secured
- Improper hose connection
- Overpressurization of cargo tank

Deliberate Discharges

- Pumping bilges
- Sabotage
- Vandalism
- Pumping ballast
- Disposal of waste oil
- Other - specify

Natural Phenomenon

- Natural seepage
- Heavy rains
- Flooding
- External heat
- Freezing
- Heavy winds
- Heavy seas
- Other - specify

## CONTAINMENT/REMOVAL

CONTAIN/REMOVAL: Enter in this field only techniques or methods that are out of the ordinary. For oil; the usual containment/ removal methods such as booms, straw dams, vacuum pumps, sorbers are not necessary. For hazardous substances definitive removal information should always be entered.

## COMMENTS

COMMENTS: Any additional information pertinent to the spill, including weather conditions at time of spill, river flow, specific enforcement action, ecological damage, cost of cleanup, removal quantity, if known, etc.

A.3 Oil and Hazardous Materials Spills (OHMS)

The RECON IV designation for the OHMS data base is File F. OHMS contains several thousand records of oil or hazardous materials spills which have been reported to the Environmental Protection Agency or the Coast Guard. There are 29 possible fields of data but not every record will have data in each of the 29 fields. The following table lists each field and indicates the RECON IV field names and/or numbers to be used when searching OHMS.

The OHMS data base consists of text (TX) and numeric fields. The OHMS numeric fields do not have provision for decimal points.

To search date fields the date is entered yymmdd where

yy represents year

mm represents month

dd represents day

For example, to search for all spills with reporting date of June 1, 1973 the command would be entered as:

SELECT REPDA/7306011

## FILE F. OIL AND HAZARDOUS MATERIALS SPILLS (OHMS)

| DISPLAY TITLE OF FIELD | RECON IV IDENTIFIERS FIELD NAME | NO. | TYPE OF FIELD |
|---|---|---|---|
| COMMENTS | COMMENTS | 29 | DISPLAY |
| CONTAINMENT METHOD | CONTAIN | 23 | TX |
| DAMAGES-ECOLOGICAL | ECO | 25 | TX |
| DAMAGES-OTHER | DAM | 26 | TX |
| DATE OF LAST ENTRY | UPDATE | 2 | NUMERIC |
| DURATION | DURA | 9 | DISPLAY |
| ENFORCEMENT | ENFORCE | 28 | TX |
| INSTALLATION DATE | INSTDAT | 18 | NUMERIC |
| LAST REPORTING UNIT | LASTREP | 10 | TX |
| LATITUDE | LAT | 5 | NUMERIC |
| LOCATION | LOCATION | 4 | TX |
| LONGITUDE | LONG | 6 | NUMERIC |
| NATIONALITY | NAT | 20 | TX |
| OCCURRENCE DATE | OCCDA | 8 | NUMERIC |
| OPERATION | OPERATION | 22 | TX |
| ORGANIZATION CAUSING SPILL | ORG | 19 | TX |
| PIPE DIAMETER | PIPEID | 17 | NUMERIC |
| QUANTITY ENTERED | QUANTE | 15 | NUMERIC |
| QUANTITY SPILLED | QUANTN | 13 | NUMERIC |
| QUANTITY SPILLED (DESCRIPTION) | QUANTU | 14 | TX |
| RECON IV ACCESSION NUMBER | ACC | 1 | DISPLAY |
| REPORTING DATE | REPDA | 7 | NUMERIC |
| SOURCE OF SPILL | SOURCE | 16 | TX |
| SPECIFIC CAUSE OF SPILL | CAUSE | 21 | TX |
| SPILL CLEAN UP METHOD | CLEAN | 24 | TX |
| TITLE | TITLE | 3 | TX |
| TOTAL COST ($K) OF CLEAN UP | COST | 27 | TX |
| TYPE OF POLLUTION | TYPE | 12 | TX |
| TYPE OF WATER AREA | BODY | 11 | TX |

NOTES:

1) Do not use slashes when searching dates.

   Example: SELECT REPDA/730601 is the correct way to search for spills with reporting date of June 1, 1973

2) Display fields are not searchable

3) Default field: TX(Text) searches all fields identified as TX.

4) Accession Number (Oil and Hazardous Material Spills No.) has form:

nnOnnnnn

where nnnnnnn = serial number

O (ALPHABETIC character) = data base identifier (fixed)

5) Numeric fields do not provide for decimal points.

Sample OHMS Record

(1) OIL AND HAZARDOUS MATERIALS - SPILLS: 72029183
(2) DATE OF LAST ENTRY: 74/05/15
(3) TITLE: OIL
(4) LOCATION: NEW YORK//OGDENSBURG
(8) OCCURENCE DATE: 74/04/15
(10) LAST REPORTING UNIT: 2
(11) TYPE OF WATER AREA: INLAND ST. LAWRENCE RIVER
(12) TYPE OF POLLUTION: CRUDE
(13) QUANTITY SPILLED: 50,000
(14) QUANTITY SPILLED (DESCRIPTION): GALLONS
(15) QUANTITY ENTERED: 50,000
(16) SOURCE OF SPILL: OFFSHORE TRANSPORTATION T/V IMPERIAL SARNIA CN
(19) ORGANIZATION CAUSING SPILL: T/V IMPERIAL SARNIA CN
(21) SPECIFIC CAUSE OF SPILL: CASUALTY - VESSEL AGROUND
(23) CONTAINMENT METHOD: COMMERCIAL CLEANUP

COMMON WORD* LIST FOR THE OHMS FILE

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WORD DELIMITERS FOR THE OHMS TEXT FILE:

: ; / -

A space also serves this function.

*Common words are not listed in OHMS index files; therefore common words can be neither searched nor included in phrase searches.